

Remarks/Arguments

Applicants have received and carefully reviewed the Office Action of the Examiner mailed November 9, 2007. Currently, claims 23-36 remain pending of which claims 24-27 and 33-36 were previously canceled. Claims 23-36 have been rejected. Favorable consideration of the following remarks is respectfully requested.

Claim Rejections – 35 USC § 103

Claims 23-36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Heath (U.S. Patent No. 5,725,570) in view of Bellouard et al. (U.S. Patent No. 6,669,794). After careful review, Applicant must respectfully traverse this rejection.

“All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). (MPEP § 2143.03).

As discussed previously, and as acknowledged by the Examiner, “Heath does not state that an intermediate portion of the prior art devices is flexible or superelastic, ‘only one’ superelastic region as recited in instant claim 29, does not refer to ‘filter legs’ as recited in instant claims 25 and 34, and does not refer to the temperature range of instant claim 31.” (Examiner’s attention is drawn to the fact that claims 25 and 34, as members of the groups 24-27 and 33-36, were canceled in the amendment transmitted electronically on October 24, 2007 in response to the Final Office Action of June 29, 2007. The following remarks will be presented as though the rejection had been directed toward pending claim 23 (corresponding to now canceled claim 25), which had been amended to incorporate the elements of claim 25, and toward claim 28, which had been amended to incorporate the elements of claim 34.) In particular, nowhere does Heath appear to disclose a “a linear elastic member having at least one localized area of flexibility formed by selectively heating an intermediate portion of the member to a temperature sufficient to induce superelasticity in the member, wherein the linear elastic member defines a filter leg”. Furthermore, nowhere does Bellouard et al. disclose, “a linear elastic member having at least one localized area of flexibility formed by

selectively heating an intermediate portion of the member to a temperature sufficient to induce superelasticity in the member, wherein the linear elastic member defines a filter leg”. Additionally, nowhere does Bellouard et al. appear to remedy the shortcomings of Heath. Initially, it should be noted that the word “filter” does not appear in either Heath or Bellouard et al. and so, taken separately or in combination, they cannot be said to disclose a filter leg having *any* particular property, let alone the specific property of having a linear elastic member having an intermediate portion of the member which is superelastic, however formed. With respect to the disclosure of Bellouard et al., it should be noted that the passage cited by the Examiner, at col. 7, lines 5-10, forms part of a discussion of Fig. 3 starting at col. 6, line 46, which is said to depict an *amorphous* thin strip 20 of nitinol having an annealed region 28 *adjacent to a one piece* zone 30. (Emphasis added, see col. 6, lines 46-53.) The phrase “linear elastic” does not appear in Bellouard et al. It is difficult to see how Figure 3 of Bellouard et al., which consists of only two adjacent regions, can disclose a linear elastic filter leg having an “intermediate portion”, implying an A-B-A structure. Additionally, Bellouard et al. appears to contemplate annealing *amorphous* nitinol rather than the more conventional modification of martensitic, austenitic, or mixed martensitic/austenitic nitinol produced by strain induced crystallization and/or annealing. Since Bellouard et al. does not appear to mention linear elastic nitinol, it does not appear to be possible for Bellouard et al. disclose treating a linear elastic nitinol element, as opposed to an amorphous nitinol element, with his laser device.

The Examiner further asserts (b) that the interwoven material depicted in the drawings of Heath would appear to be suitable as a filter or filter leg material. It must be noted that a “filter” and a “filter leg” are generally quite distinct in structure and Applicants are unaware of an interwoven filter leg in the art. (A full text search of the patents and published patent applications performed on December 21, 2007 failed to find an instance of an “interwoven filter leg”. The use of a stent material to form a filter would seem necessarily to defeat the purpose of either the stent or the filter given the dictionary definitions:

filter (noun): device that removes something from whatever passes through it

stent (noun): a metal wire or tube introduced into a stenotic blood vessel to create and maintain luminal patency (the openness (lack of obstruction) of a bodily passage or duct).

A filter, by its nature, obstructs the passage of the suspended solids, while a stent, by its nature creates an unobstructed passage. The mesh of Heath might, in some configurations, be suitable for forming a filter bag, however a filter bag is recognized as being different from a filter leg.

The Examiner further asserts (c) that “the temperature range in Heath column 8 overlaps that presently claimed.” Heath, at column 8, does not disclose a temperature range, but rather a single temperature, 460 °C. The assertion is somewhat puzzling since the Examiner has stated, earlier in the current Office Action that, ““Heath does not refer to ... the temperature range of instant claim 31.” Applicants’ claims, particularly claim 31, do not provide a numerical range of suitable temperatures. Turning to the specification, the extremes cited only span 300 to 400 °C at page 7, line 9 and that range does not include 460 °C. Absent the elements of claims 23 and 28 as enumerated above, acknowledged by the Examiner to be absent in Heath and demonstrated to be absent in Bellouard et al., Heath in view of Bellouard et al. does not appear to teach all the claim limitations, as is required to establish a *prima facie* case of obviousness and Applicants respectfully request withdrawal of the rejection.

For similar reasons discussed above, as well as others, claims 29-32, which depend from claim 28 and include significant additional limitations, are believed to be patentable over Heath in view of Bellouard et al. and Applicants respectfully request withdrawal of the rejection.

Furthermore, in the Office Action the Examiner has rejected claims 23, 25, 27-32, 34, and 36 as being unpatentable under 35 U.S.C. 103(a) over Muni et al. (U.S. Patent No. 6,375,629 in view of Bellouard et al. (U.S. Patent No. 6,669,794). (Examiner’s attention is again drawn to the fact that claims 25 and 34, as members of the groups 24-27 and 33-36, were canceled in the amendment transmitted electronically on October 24, 2007 in response to the Final Office Action of June 29, 2007. The following remarks will be presented as though the rejection had been directed toward pending claim 23

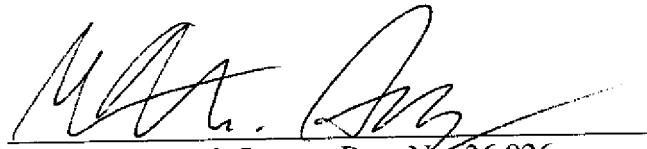
(corresponding to now canceled claim 25), which had been amended to incorporate the elements of claim 25, and toward claim 28, which had been amended to incorporate the elements of claim 34.) The Examiner states that Muni et al. fails to teach that an intermediate portion of the prior art devices is flexible or superelastic, “only one” superelastic region as recited in instant claim 29, does not refer to “filter legs” as recited in instant claims 25 and 34 (now 23 and 28 respectively), and does not refer to the temperature range of instant claim 31. The Examiner presents Bellouard et al. largely as discussed above in an attempt to overcome these shortcomings of Muni et al. Bellouard et al. does not mention filters, let alone “filter legs”. Muni et al. mentions “filter” exactly once in the context of a possible use for the deploying core wire of Muni and does not provide a “filter leg” or even a filter made from the material of the Muni core wire. There is nothing in Muni et al. or Bellouard et al. which would lead one of ordinary skill in the art to believe that the material of Muni would be suitable for the construction of a filter leg. “Linear elasticity” only appears in Muni et al. as a property of the distal *tip* of the core wire. Superelasticity only appears in the proximal portion of the Muni et al. core wire. There is in Muni et al., as the Examiner has stated, no intermediate portion of the prior art devices (which) is flexible or superelastic. As noted above, Bellouard et al. does not appear to provide this missing element and certainly does not do so in the form of a filter leg comprising a linear elastic material. As far as can be determined, the relevant processing temperatures taught Muni et al. as presented at column 7, lines 54-67 require heating to “above about 500 °C, more preferably above about 700 °C, and in one preferred embodiment, about 750 °C.” to make the single proximal region of Muni et al. superelastic. A subsequent aging step at a lower temperature does not appear to be sufficient to bring about the necessary phase transition. The sole temperature in Bellouard et al. cited by the Examiner, 460 °C, also is outside the 300 to 400 °C of the current specification. Absent the elements of claims 23 and 28 as enumerated above, acknowledged by the Examiner to be absent in Muni et al. and demonstrated to be absent in Bellouard et al., Muni et al. in view of Bellouard et al. does not appear to teach all the claim limitations, as is required to establish a *prima facie* case of obviousness and Applicants respectfully request withdrawal of the rejection.

For similar reasons discussed above, as well as others, claims 29-32, which depend from claim 28 and include significant additional limitations, are believed to be patentable over Heath in view of Bellouard et al. and Applicants respectfully request withdrawal of the rejection.

In view of the foregoing, all pending claims are believed to be in a condition for allowance. Reexamination and reconsideration are respectfully requested. Issuance of a Notice of Allowance in due course is anticipated. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Date: Jan. 11, 2003

A handwritten signature in black ink, appearing to read "G.M. Seager", written over a horizontal line.

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